

Joseph Matthew Clampitt

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Education

Ph.D. Physics, University of Pennsylvania, May 2014
Advisor: Bhuvnesh Jain, Department of Physics and Astronomy
Thesis: Weak Lensing and Modified Gravity of Cosmic Structure

B.S. Physics (Honors), Purdue University, 2009
Summa Cum Laude

Research Experience

Postdoctoral Researcher, Advisor: Bhuvnesh Jain
University of Pennsylvania

2014—present

Research Assistant, Advisor: Bhuvnesh Jain
University of Pennsylvania

2010—2014

Undergraduate Research Assistant, Advisor: Ian Shipsey
Purdue University

2007—2009

Research Experience for Undergraduates, Advisor: Jose Lazo-Flores
CERN (European Council for Nuclear Research)

Summer 2008

Research Experience for Undergraduates, Advisor: Mark Messier
Indiana University

Summer 2007

Publications

Clampitt, Jain “Lensing Measurements of the Ellipticity of LRG Dark Matter Halos”
MNRAS accepted, arxiv:1506.03536

Clampitt, Miyatake, Jain, Takada, “Detection of Stacked Filament Lensing Between SDSS Luminous Red Galaxies” MNRAS accepted, arXiv:1402.3302

Clampitt, Jain, Sanchez “Clustering and Bias Measurements of SDSS Voids” MNRAS 456, 4425 (2016)

The Dark Energy Survey Collaboration, et al. “Cosmology from Cosmic Shear with DES Science Verification Data” arxiv:1507.05552

Park, et al. “Joint Analysis of Galaxy-Galaxy Lensing and Galaxy Clustering: Methodology and Forecasts for DES” arxiv:1507.05353

Clampitt, Jain “Lensing Measurements of the Mass Distribution in SDSS Voids” MNRAS 454, 3357 (2015)

Lam, **Clampitt**, Cai, Li “Voids in Modified Gravity Reloaded: Eulerian Void Assignment” MNRAS 450, 3319 (2015)

Melchior, et al. “Mass and galaxy distributions of four massive galaxy clusters from Dark Energy Survey Science Verification data” MNRAS 449, 2219 (2015)

Clampitt, Cai, Li “Voids in modified gravity: excursion set predictions” MNRAS 431, 749 (2013)

Clampitt, Jain, Khoury “Halo scale predictions of symmetron modified gravity” JCAP 1, 30 (2012)

Invited Talks and Sessions Coordinated

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| Coordinated session at Dark Energy Survey Madrid meeting "Galaxy-galaxy Lensing Projects in Year 1 Data" | October 2015 |
| Invited talk at Kavli IPMU, Chiba, Japan "Halo Ellipticity with Weak Lensing" | July 2015 |
| Invited talk at Princeton University, Princeton, NJ "Lensing Measurements of SDSS Voids" | December 2014 |
| Berkeley Cosmology Seminar, Berkeley, CA "Lensing Measurements of SDSS Voids and Filaments" | October 2014 |
| Coordinated session at Dark Energy Survey (DES) Sussex meeting "Galaxy-galaxy Lensing in Science Verification Data" | October 2014 |
| Invited talk at Cosmic Voids workshop, Columbus, OH "Weak Lensing Mass Profiles of SDSS Voids" | August 2014 |
| Invited talk at American Physical Society meeting, Savannah, GA "Weak Lensing with the Dark Energy Survey" | April 2014 |
| Coordinated session at Dark Energy Survey (DES) Barcelona meeting "Galaxy-galaxy Lensing in Science Verification Data" | October 2013 |
| Coordinated session at DES Lensing plus Structure meeting, Fermilab "Galaxy-galaxy Lensing in Simulations" | May 2013 |
| Coordinated session at DES Lawrence Berkeley National Lab meeting "Galaxy-galaxy Lensing in Early Cluster Data" | April 2013 |
| Co-coordinated two sessions at DES Texas A&M meeting "Topics in Galaxy-galaxy Lensing" and "Combined Probes: Lensing plus Structure" | December 2012 |

Other Talks and Posters

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| Durham University: Ripples in the Cosmos "Voids in Modified Gravity: Excursion Set Predictions" | July 2013 |
| Dark Energy Survey Munich meeting "Galaxy-galaxy Lensing: DES Forecasts and Baryon Systematics" | May 2012 |
| East Coast Gravity Meeting "Halo Scale Predictions of Symmetron and Chameleon Gravity" | April 2012 |
| CERN Summer Student presentations, Meyrin, Switzerland "Displays for the CMS Beam Conditions and Radiation Monitoring System" | July 2008 |
| Purdue Undergraduate Research Poster Symposium "Image Distortions Due to Variations in Camera Flatness for the Large Synoptic Survey Telescope" | March 2008 |
| Argonne Undergraduate Research Symposium "Transfer Matrix Method for Using the NovA Surface Detector to Measure the Neutrino Spectrum at MINOS" | November 2007 |
| Purdue Undergraduate Research Poster Symposium "Testing the Compact Muon Solenoid Forward Pixel Detector" <i>Winner of College of Science Dean's Award</i> | March 2007 |

Service and Awards

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| Refereed for journals JCAP and MNRAS | 2015 – present |
| Coordinated DES galaxy-galaxy lensing subgroup | 2013 – present |
| Zaccheus Daniel Foundation for Astronomical Science Fellowship | 2012 – 2013 |
| Organized University of Pennsylvania weekly Astrophysics Journal Club | 2011 – 2012 |
| College of Science Dean's Award, Purdue Undergraduate Poster Symposium | 2007 |

Teaching Experience

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| Guest lecturer, University of Pennsylvania Introduction to Astrophysics II | 2013 |
| Teaching Assistant, University of Pennsylvania General Physics Lab: Mechanics, Heat, and Sound | 2009 – 2010 |
| Undergraduate Teaching Assistant, Purdue University Matter and Interactions: Mechanics | 2006 |

References

Dr. Bhuvnesh Jain

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Dr. Masahiro Takada

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Dr. Sarah Bridle

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Dr. Baojiu Li

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